

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An optical fiber probe for diagnosing a combustion condition in a combustor, comprising:
 - an optical fiber;
 - a first protective pipe holding the optical fiber therein for protection; and
 - a collet attached to a front part of the first protective pipe;wherein an adhesive is filled in a base part of the first protective pipe to form a sealing ~~plug~~plug, and
the optical fiber is movable relative to the collet during diagnosis of the combustion condition.
2. (Canceled)
3. (Original) The optical fiber probe according to claim 1 further comprising a second protective pipe covering the optical fiber and fitted in the first protective pipe.
4. (Original) The optical fiber probe according to claim 1, wherein the first protective pipe is formed in a length such that the base part of the first protective pipe is cooled by natural cooling at temperatures nearly equal to an ordinary temperature.
5. (New) The optical fiber probe according to claim 1, wherein the optical fiber and the collet are heat-resistant.
6. (New) The optical fiber probe according to claim 1, wherein the optical fiber extends through the collet.